

REMARKS

The Office Action of November 25, 2009 has been carefully considered. Reconsideration of this application, as amended, is respectfully requested.

In the Listing of Claims, claims 1, 24, 30 and 31 have been amended. Withdrawn claim 32 has been canceled and new claim 35 has been added.

Summary

Turning now, to the office action, the restriction requirement of July 24, 2009 has been made final and claim 32 was withdrawn from further consideration. Claim 31 was rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. A new rejection under 35 U.S.C. §112, second paragraph, has been set forth relative to claim 1, and therefore claims 2-3, 5, 7-18, 20-29, 31 and 33-34. Claims 1-3, 5, 7, 9, 18, 20-23, 25-31, and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Contreras (U.S. patent No. 5,824,243) in view of Burris (U.S. patent No. 5,207,993; Burris '993). Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burris '993 in view of Contreras. Claims 1-3, 5, 7-16, 18, 20-23, 25-29, and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Engelhard et al. (U.S. patent No. 5,942,125) in view of Burris '993. Claim 24 was rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhard in view of Burris '993 or Contreras in view of Burris '993 as applied to claim 23 above, and further in view of McMahon (U.S. Patent No. 5,681,370).

Restriction Requirement

In regard to the restriction requirement, Applicants continue to disagree with the Examiner's basis for restriction, a basis that has been improperly modified while at the same time made final. Nonetheless, in the interest of advancing prosecution, Applicants have cancelled method claim 32. A new method claim, believed to be consistent with the limitations of the independent apparatus claims has been set forth in claim 35.

35 USC §112 Rejections

With regard to the rejection of **claim 31** for the use of the term “automatically,” Applicants respectfully disagree with the Examiner’s conclusion and assert that a teaching of the automatic operation of the controller would be clearly understood by one of ordinary skill in the art reading Para. 0021. Nonetheless, in order to advance prosecution of the application, claim 31 has been amended to remove the term “automatically” and to recite similar limitations as found in Para. 0021. In light of the amendment, and support in the specification, withdrawal of the rejection is respectfully requested.

Applicants submit amendments that are believed to overcome the new rejection set forth under 35 USC §112, second paragraph, relative to **claim 1** and use of the phrase “such as.” The Examiner’s confirmation of entry of the amendments presented herein, and the withdrawal of the rejection, is respectfully requested.

35 USC §103 Rejections Traversed

In order to establish *prima facie* obviousness, the Examiner is obligated to show that each and every limitation of the claim is described or suggested by the prior art or would have been obvious based on the knowledge of those of ordinary skill in the art. *In re Fine*, 837 F. 2d 1071, 1074 (Fed. Cir. 1988). The rejection of **claims 1-3, 5, 7, 9, 18, 20-23, 25-31, and 33-34** under 35 USC §103(a) as being unpatentable over Contreras in view of Burris ‘993 is respectfully traversed.

Considering the rejection, Applicants submit that the suggested combination fails to support all the limitations recited in amended independent claims 1 or 30. Among other limitations, Applicants respectfully urge that Contreras and Burris ‘993, both alone or in combination, fail to teach a continuous circulation system that continuously re-circulates the liquid containing dissolved ozone through a pressurized liquid recirculation passageway connected to and providing liquid containing dissolved ozone to the operatory unit, the circulation system including a back pressure control to maintain pressure sufficient to dispense the ozonated liquid from the recirculation passageway, and a separation system that separates undissolved gas from the ozonated liquid prior to pressurizing and circulating the ozonated liquid through the recirculation passageway.

Furthermore, the Examiner has provided no basis for support of a position as the function or operation of the pump disclosed by Contreras. Yet the Examiner maintains that the “operation of the pump (10) of Contreras generates an increased pressure of fluid flow and therefore is capable of operating as a pressure regulator in the circulation system. For example, turning the pump (10) on/off or even operating the pump speed generates different amounts of fluid pressure within the fluid lines.” In the event that the alleged functionality continues to be submitted as the basis for the rejection, Applicants respectfully request that the Examiner indicate where the functionality is taught or otherwise established as inherent. And, Applicants continue to urge that the Examiner has ignored limitations relative to the recited control system (e.g., claim 1) and that neither Contreras nor Burris ‘993, alone or in combination, teach a control system including an ozone sensor located in a liquid recirculation passageway, and an alarm to indicate whether the device is operating properly (e.g., claim 1). The Examiner continues to allege such limitations are taught by Burris ‘993, however, Burris ‘993 is also not understood to include a pressurized liquid recirculation passageway, let alone one that includes an ozone sensor.

In light of the amendments to claims 1 and 30 and arguments above, independent claims 1 and 30 are believed to be patentably distinguishable over a combination of Contreras in view of Burris ‘993. Accordingly, the rejection is again traversed, and Applicants respectfully submit that independent claims 1 and 30 are in condition for allowance, as are all claims dependent from claim 1.

Once again, for purposes of brevity, Applicants have not specifically addressed the limitations of each of the rejected claims dependent from amended independent claims 1 or 30, but respectfully urge them to be patentable for the reasons set forth relative to claims 1 and 30. Applicants reserve the right to submit further arguments in support of the dependent claims in a subsequent communication or on appeal.

Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Burris '993 in view of Contreras. This rejection is also respectfully traversed. In addition to the distinctions noted above, Applicants respectfully submit that the Examiner has taken the teachings of Burris '993 out of context. The Examiner urges that Burris '993 teaches “[a] continuous circulation system, i.e., circulation loop, draws liquid from reservoir 36 via line 16 through pumping system 20 (which is a pressure regulator) and returns purified liquid to the reservoir via line 41. Therefore, the circulation

system re-circulates liquid containing dissolved ozone and is capable of continuous circulation (Col. 5, 11.59-67).” In response to Applicants arguments, the Examiner further urges that he “finds this argument not persuasive for the following reasons. Even of [sic] Burris '993 is a batch unit, Burris does disclose continuous recirculation within the batch unit. The claimed limitation of "a continuous circulation system that continuously re-circulates the liquid" is not strictly distinct from the structure disclosed by Burris.”

To the contrary, while teaching circulation during a batch purifying operation, Burris '993 clearly indicates that after purifying circulation, the output route is changed to flow to an outlet from the pumping system and the ozone generator is turned off when this occurs. (e.g., col. 5, line 50 – col. 6, line 4) Such a teaching, of a batch mode, is believed contrary to the limitations found in amended claim 1, including “a continuous circulation system that continuously re-circulates the liquid containing dissolved ozone through a pressurized liquid recirculation passageway connected to and providing liquid containing dissolved ozone to the operatory unit, said circulation system including a back pressure control to maintain pressure sufficient to dispense the ozonated liquid from the recirculation passageway.” Further, the Examiner concludes “[t]herefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the outlet of the device disclosed by Burris to an operatory unit in order to supply the operatory unit with sterile water as exemplified by the device of Contreras whom teaches that it is well known to generate sterilize ozonated water for use in operatory units.” Perhaps this could be true if the claimed device was intended to output sterile water. However the claimed device disinfects operatory unit water and lines and requires outputting water containing dissolved ozone. There is a difference as one skilled in the art realizes.

It is unclear to Applicants, and thus to one of ordinary skill in the art, how the Examiner arrives at a conclusion that a continuous circulation system is taught, let alone one that re-circulates liquid containing dissolved ozone and at the same time provides it to the operatory unit. In view of Burris '993 teaching away from the claimed invention, Applicants respectfully submit that it would not have taught or suggested to one of ordinary skill in the art that which the Examiner has stated. Withdrawal of the rejection is respectfully requested.

Claims 1-3, 5, 7-16, 18, 20-23, 25-29, and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Engelhard et al. (U.S. patent No. 5,942,125) in view of Burris '993. The rejection is respectfully traversed in view of the amendments presented above in claim 1. In addition to the distinctions noted above, Applicants respectfully submit that Engelhard also fails to teach all of the recited limitations of claim 1, as well as claims dependent therefrom. For example, Engelhard fails to teach a “a separation system that separates undissolved gas from the ozonated liquid prior to pressurizing and circulating the ozonated liquid through the recirculation passageway.” (emphasis added)

In view of the amendment to claim 1, and arguments presented herein, Applicants respectfully urge that claim 1 is patentably distinguishable over the teachings of Engelhard and Burris '993, alone or in combination, and withdrawal of the rejection is respectfully requested. Again, for purposes of brevity, additional arguments relative to the dependent claims are reserved for a subsequent response or on appeal.

Claim 24 was rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhard in view of Burris '993 or Contreras in view of Burris '993 as applied to claim 23 above, and further in view of McMahon (U.S. Patent No. 5,681,370). The new rejection is traversed as being ambiguous and relying on an earlier claim rejection of claim 23 when claim 24 depends directly from claim 1. Nonetheless, Applicants submit the following arguments in rebuttal of the rejection.

Applicants question, what basis the Examiner urges for the alleged combination(s) when, as acknowledged, the prior references lack any teaching relative to the source of dry air. Absent such, it appears that the claim limitations have been employed as the sole basis for the alleged combination.

Furthermore, amended claim 24, sets forth particular relationship between the desiccant and the valves (note plurality) that are closed to prevent the desiccant's exposure to moist air. Applicants respectfully urge that such limitations are not taught or suggested by McMahon valves 78 and 88 (switch between dry / purge modes), nor any combination as presently alleged therewith. More specifically, while McMahon teaches valves, they do not appear arranged to protect desiccant from exposure to moist air, and McMahon teaches away from such an embodiment in describing open top for cavity 40 in which desiccant 50 is placed (e.g., col. 2, line 65 – col. 3, line 21). And, McMahon teaches the drying of desiccant 50 (col. 5, line 66 –

col. 6, line 33) and thus is not concerned with reducing its exposure to moist air while not in operation. In view of the above-noted distinctions, the rejection of amended claim 24 is respectfully traversed and withdrawal of the rejection is requested.

In view of the foregoing remarks and amendments, reconsideration of this application and allowance thereof are earnestly solicited. In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicant's attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,

/Duane C. Basch, Esq. Reg. No. 34,545/

Duane C. Basch

Attorney for Applicant

Registration No. 34,545

Basch & Nickerson LLP

1777 Penfield Road

Penfield, New York 14526

(585) 899-3970

DCB/dcm